

**SAS Superstructure**

Location: 04-SF-80-13.2 / 13.9

Client Name: CalTrans

Run date 21-Nov-14

Time 10:43 PM

Daily Diary Report by Bid Item

Contract No.: 04-0120F4

Diary #: 456 Const Calendar Day: 29 Date: 03-Jul-2012 Tuesday

Inspector Name: Brignano, Bob Title: Transportation Engineer

Inspection Type:

Shift Hours: Break: Over Time:

Federal ID:

Location:

Reviewer: Schmitt, Alex Approved Date: Status: Submit

**04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge****Weather**

Temperature	7 AM	12 PM	4 PM
Precipitation			Condition clear

Working Day ☒ If no, explain:**Diary:**

Dispute

General Comments

CCO 148, PWS ANCHORAGE BEARING BLOCK BOLTS:

I have a conversation with ABF Engineer Eric Blue today regarding the CCO 148 PWS Anchorage Bearing Block Bolts. The bolts that hold the PWS anchor rod bearing blocks are not currently tight. They are only required to be snug tightened. For shipment from ZPMC, they were not even required to be snug tightened in case adjustments were necessary in the field. I tell Eric that he should snug tighten these bolts before ABF has CCC do paint/galvanizing repairs in the area - otherwise they risk damaging the repaired paint/galvanizing in the area when the bolts are tightened. The CCO 148 portion of this issue is complete, with CCO 148 addressing the change from metric bolts/nuts/washers to shorter lead-time Imperial bolts/nuts/washer that were rush shipped (air freight) to the fabrication site. Note that TC-RFI-0315R0 also addressed the work at ZPMC at this area.

CCO 202, EAST END ANCHORAGE ACCESS OPENING CLOSURE PLATES;
HIGH STRENGTH FASTENER ASSEMBLY PRE-INSTALLATION TESTING:

LeJeune Bolt Company bolt Shipment 155 was sampled on 5/16/2012. After Translab finished testing and found the material to be acceptable for use, I notified ABF of the passing QA testing on 5/25/2012. This material is 1" and 1-1/8" Geomet coated A490 bolts, A563 nuts, and F436 washers. Bolts, nuts, and washers were delivered, but rocap testing was not performed by the supplier. The nuts were not tapped oversized and the application of the Geomet coating was spray application rather than dip spin. ABF directed this fabrication method for the nuts to expedite the delivery and avoid custom tooling for a custom overtap. As a result, LeJeune Bolt Company would not perform rocap testing. When samples were pulled and again when I notified ABF of the passing QA testing, I also notified ABF that because manufacturer rocap testing documentation was not provided, the material would not be final accepted until acceptable rocap testing was completed on site.

Rocap testing of this material is today. ABF Engineer Chris Bausone is on vacation, so ABF Engineer Levi Gatsos conducts the testing with Smith-Emory QC Chris Chew. Sampling and testing is from 0930 to 1130. After samples are pulled, 5 tests of each assembly are performed for rocap, minimum tension verification, and determining the inspection torque.

There is an issue with testing one of the rocap lots, but it is a testing error rather than an issue with the supplied material. For the 1-1/8" diameter assembly, there was a computer error during the testing of the fifth bolt resulting in no turn stopping point with the machine. The machine turned the nut until the bolt broke. No data was recorded because it was a computer error. These test was tossed as an obvious testing error and because no data was available. The bolt broke with more than the required 240-degree



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rotation of the nut, although the rotation amount was not recorded due to the computer error. A replacement assembly was sampled and tested as the new fifth test. The broken bolt was not representative of this material and the other 5 assemblies tested behaved normally.

Equipment = Bolt Testing Conex ABF ID 002079 and Skidmore Model HT 4000 ABF ID 000612.

ABF: engineer Levi Gatsos is present full time.

Smith Emory QC: Chris Chew is present full time.

CT: Bob Brignano is present full time.

Testing is in the morning, approximately from 0930 to 1130 for 2 hours.

Testing consists of 5 representative samples each from 1 lot each of 1" and 1-1/8" ASTM A490 high strength fastener assemblies. All testing is successfully completed and the material is released. The material is as follows:

1" Material:

A490 Bolt Lot 304106AZ, Heat NF12100392

A563 DH Heavy Hex Nut Lot TK811Z, Heat M43164

F436 Washer Lot 255707Y, Heat 117791

1-1/8" Material:

A490 Bolt Lot 288574AX, Heat NF10203627

A563 DH Heavy Hex Nut Lot NR191Z, Heat M32376

F436 Washer Lot C4569Z, Heat 32241C

See the attached Bolt Test Form for details of the testing.

CCO 240, JACKING SADDLE JACK CALIBRATION:

Per CCO 240, we have added a requirement to monitor the jacking force at the jacking saddle (it was previously only displacement based). There are 16 jacks that will be calibrated to "A" and "B" gauges. Also, 2 backup jacks will be calibrated to 8 different gauges. The jacks to be calibrated are 300 Ton Enerpac jacks. Calibration of the jacks is today at Schwager Davis in San Jose, inspected by Translab with a load cell in the pressure area for QA verification of the load amount. The calibration work at Schwager Davis is started and completed today, except there are leak problems with 2 jacks that cannot have the calibration completed.

Per discussions and emails with ABF (Levi Gatsos), all the calibrated (16 each) and leaky (2 each) jacks will be sent back to the jobsite, and then repaired jacks and/or additional jacks will be sent to Schwager Davis in the future for calibration. ABF's plan is to repair the 2 leaky jacks (repair not on CCO) and then send the 2 repaired jacks plus 2 other jacks to SDI for calibration. Note that there are 6 spare jacks at the warehouse that were pulled from the compaction machines and not sent to SDI for calibration for use at the jacking saddle - 24 total jacks were pulled from the 4 compaction machines, with 16 calibrated jacks needed at the jacking saddle operation, 2 calibrated jacks needed as spares at the jacking saddle operation, and 6 spare jacks not involved in the jacking saddle operation. When ABF states its plan to repair 2 jacks and send the 2 repaired jacks plus 2 other jacks to SDI for calibration, I suggest not waiting for the repair of the 2 leaking jacks and instead send any/more of the 6 spare jacks in the warehouse. No decision is made today on a plans for proceeding.

ITEM 60 ERECT STRUCTURAL STEEL (BRIDGE)(SADDLE);
WEST DEVIATION SADDLES AND JACKING SADDLE:

WDS-N, WDS-S, and WJS tie rods have not been stressed yet. ABF has stressing equipment on order, and it was scheduled to arrive by the end of June, so that these tie rods can be stressed before load transfer, as required. Then, last week, there was a revised arrival date of Monday 7/2/2012 when the equipment was to arrive from England (but that was not when ABF would really get the equipment,

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because that depends on customs issues). Today I discuss with Levi the status of the Boltight equipment. The Boltight equipment arrived in the USA from England. It is in customs now and will be shipped to CA soon, with an expected arrival on Thursday (7/5/2012) or Friday (7/6/2012) of this week.

INSPECTOR OT REMARK:

2 hours OT: Issues with CCO 240 jack calibration at Schwager Davis for the jacking saddle - late discussions with ABF and METS. Also working in the office updating the cable band gaps and cable band bolt tension spreadsheet with new data from the field, including making modifications to the plots per various requests for changes.